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Welcome to STN International
                                                                                                                                     * * * * * STN Columbus * * * * * *
FILE 'HOME' ENTERED AT 11:52:58 ON 15 APR 2008
=> file reg
=> Uploading C:\Program Files\Stnexp\Queries\Queries\10554187.str
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     22-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18
chain nodes :
ring nodes :
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
ring/chain nodes :
20
chain bonds :
5-14 6-9 20-21
ring bonds :
1-2 \quad 1-6 \quad 2-3 \quad 3-4 \quad 4-5 \quad 5-6 \quad 7-8 \quad 7-12 \quad 8-9 \quad 9-10 \quad 10-11 \quad 11-12 \quad 13-14 \quad 13-18 \quad 14-12 \quad 13-14 \quad 13-14 \quad 13-18 \quad 14-12 \quad 13-14 
15 15-16 16-17 17-18
exact/norm bonds :
20-21
exact bonds :
5-14 6-9
normalized bonds :
1-2 \quad 1-6 \quad 2-3 \quad 3-4 \quad 4-5 \quad 5-6 \quad 7-8 \quad 7-12 \quad 8-9 \quad 9-10 \quad 10-11 \quad 11-12 \quad 13-14 \quad 13-18 \quad 14-19 \quad 13-19 \quad 14-19 
15 15-16 16-17 17-18
isolated ring systems :
containing 1:7:13:
Match level:
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 20:CLASS
21:CLASS 22:Atom
=> s 11 sam
L2
                                                                                                     1 SEA SSS SAM L1
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=> s 11 full

L3 36 SEA SSS FUL L1

=> file caplus

=> s 13

L4 5 L3

=> s 14 and pd< april 2003 23709103 PD< APRIL 2003

(PD<20030400)

=> dis 14 1-5 bib abs fhitstr

L4 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2007:754778 CAPLUS Full-text

DN 147:158512

TI Pharmaceutical compositions containing substituted phenyl- or heteroaryl-substituted pyridines or pyrimidines

IN Hirai, Miki; Kusama, Mari; Hosaka, Toshihiro; Komi, Shuntaro

PA Tanabe Seiyaku Co., Ltd., Japan

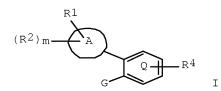
SO Jpn. Kokai Tokkyo Koho, 41pp. CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
ΡI	JP 2007176933	A	20070712	JP 2006-320941	20061129		
PRAI	JP 2005-343013	A	20051129				
OS	MARPAT 147:158512						
GT							



Substituted pyridines or pyrimidines I [ring Q indicates pyridine or pyrimidine; ring A indicates benzene or heteroarom. ring; G = (un)substituted benzene, (un)substituted heterocycle, (un)substituted cycloalkane, (un)substituted cycloalkene, (un)substituted amino; R1 = amido, hydrazido, hydroxamic acid residue, ester group, cyano, etc.; R2, R3 = cyano, N02, etc.; m, n = 0-2; R4 = H, halo, etc.; R5, R6 = H, (un)substituted alkyl, etc.] or their salts are useful as high-conductance Ca-sensitive K channel openers for pharmaceutical compns. for prevention and/or treatment of urinary frequency, urinary incontinence, asthma, or chronic obstructive pulmonary disease (COPD). 2-(2-Methylpyridin-5-yl)-3-(4-aminocarbonyl)phenyl-5-chloropyridine (preparation given) inhibited the KCl-induced contraction of rabbit bladder with IC50 of 0.5-1  $\mu$ M.

IT 870723-07-2P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU

## 10/554,187

(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of substituted phenyl- or heteroaryl-substituted pyridines or pyrimidines as high-conductance Ca-sensitive K channel openers for pharmaceutical compns.)

RN 870723-07-2 CAPLUS

CN Benzamide, N-[(5-methyl-2-pyrazinyl)methyl]-4-(3-phenyl-2-pyridinyl)-, hydrochloride (1:1) (CA INDEX NAME)

● HCl

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L4 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN
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AN 2005:1288063 CAPLUS Full-text

DN 144:36364

TI Bicyclic compounds

IN Hirai, Miki; Kusama, Mari; Hosaka, Toshihiro; Kohnomi, Shuntarou

PA Tanabe Seiyaku Co., Ltd., Japan

SO PCT Int. Appl., 68 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1																		
	PATENT NO.				KIND DATE		APPLICATION NO.					DATE						
PI	WO 2005115984						1208	WO 2005-JP10287						20050530				
	WO 2005115984					2006												
		W:				•			AZ,	•								
									DK,									
						•	•		IL,									
			•	•	•	•	•	•	LV,	•	•		•		•	•		•
			•	•	•	•	•	•	PH,	•	•		•		•	•		•
			•	,		IJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,
		D	•	ZM,			T 0	2 55 7			2.5	0.7	0.5					226
		RW:				•	•		MZ,									
			•	•	•	•	•	•	ΤJ,	•	•		•		•	•		•
			•	•	,	,	,	•	HU,	•	•		•		•	•		
			•	•				BF,	BJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,
		4.004	,	ΝE,	SN,	TD,		0000			^	005	E 4 E 6			_	0050	
	EP	1771								EP 2005-745982 DK, EE, ES, FI, FR, G							0050	
		R:															HU,	IE,
			,	,		,	,		NL,	,	,	,	,	,	,		0050	
		2008				_				JP 2006-519585 US 2006-597890								
		2007							0809		US 2	006-	5978	90		2	0061	129
PRAI	_	2004				A		2004										
		2004				A		2004										
		2004						2004										
		2004				A		2004										
	WO	2005	-JP1	0287		W		2005	0530									

AΒ Heterocyclic compds. I [Q = pyridine or pyrimidine; A = benzene or heteroarom. ring; G = ring B optionally substituted with R3, or amino optionally substituted by one or two selected from the group consisting of alkyl, aralkyl and cycloalkyl; ring B = benzene, heterocyclic ring, cycloalkane or cycloalkene; R1 = CON(R6)R5, CON(R6)OR5, CONHN(R6)R5, COON(R6)COR5, CON(R6)SO2R5, COR5, CO2R5, CN; R2 and R3 may be the same or different from each other, and each = CN, NO2, OH, alkoxy, halo, carboxyl, etc.; m = 0, 1 or 2; R4 = H, CN, OH, halo, alkoxy, carbamoyl, etc.; R5 and R6 may be the same or different from each other, and each = H, an optionally substituted alkyl, cycloalkyl, aryl, heterocyclic, alkoxycarbonyl, or R5 and R6 may form an optionally substituted heterocyclic ring in combination with atoms to which they are bonded] and pharmaceutically acceptable salt were prepared as calcium-activated K channel opener useful for treatment of pollakiuria, urinary incontinence, chronic obstructive lung disease and prophylaxis. compound II was prepared via heterocyclization reaction of III with Vilsmeier agent, and showed a relaxation effect on K-induced contraction of isolated urinary bladder.

IT 870723-07-2P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of heterocyclic compds. as calcium-activated K channel opener for treatment of pollakiuria, urinary incontinence, chronic obstructive lung disease and prophylaxis)

RN 870723-07-2 CAPLUS

CN Benzamide, N-[(5-methyl-2-pyrazinyl)methyl]-4-(3-phenyl-2-pyridinyl)-, hydrochloride (1:1) (CA INDEX NAME)

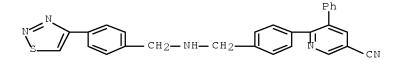
● HCl

- L4 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN
- AN 2005:86368 CAPLUS Full-text
- DN 142:211437
- ${\tt TI}$  Discovery of 2,3,5-trisubstituted pyridine derivatives as potent Akt1 and Akt2 dual inhibitors
- AU Zhao, Zhijian; Leister, William H.; Robinson, Ronald G.; Barnett, Stanley F.; Defeo-Jones, Deborah; Jones, Raymond E.; Hartman, George D.; Huff, Joel R.; Huber, Hans E.; Duggan, Mark E.; Lindsley, Craig W.
- CS Department of Medicinal Chemistry, Technology Enabled Synthesis Group, Merck Research Laboratories, Merck & Co., West Point, PA, 19486, USA
- SO Bioorganic & Medicinal Chemistry Letters (2005), 15(4), 905-909 CODEN: BMCLE8; ISSN: 0960-894X
- PB Elsevier B.V.
- DT Journal
- LA English
- OS CASREACT 142:211437
- AB This letter describes the discovery of a novel series of dual Akt1/Akt2 kinase inhibitors, based on a 2,3,5-trisubstituted pyridine scaffold. Compds. from this series, which contain a 5-tetrazolyl moiety, exhibit more potent inhibition of Akt2 than Akt1.
- IT 790659-59-5P

RL: PAC (Pharmacological activity); PKT (Pharmacokinetics); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of 2,3,5-trisubstituted pyridine derivs. as potent Akt1/Akt2 dual inhibitors)

- RN 790659-59-5 CAPLUS
- CN 3-Pyridinecarbonitrile, 5-phenyl-6-[4-[[[[4-(1,2,3-thiadiazol-4-yl)phenyl]methyl]amino]methyl]phenyl]- (CA INDEX NAME)



RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L4 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN
- AN 2004:964999 CAPLUS Full-text
- DN 141:406038
- TI Substituted pyridine compounds as inhibitors of protein kinase Akt activity for treating cancer
- IN Duggan, Mark E.; Lindsley, Craig W.; Wu, Zhicai; Zhao, Zhijian; Hartnett,

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John C.
PΑ
    Merck & Co., Inc., USA
SO
    PCT Int. Appl., 58 pp.
    CODEN: PIXXD2
\mathsf{DT}
    Patent
    English
LA
FAN.CNT 1
                 KIND DATE APPLICATION NO.
                                                               DATE
    PATENT NO.
                       ____
                                         ______
    WO 2004096135 A2 20041111 WO 2004-US12265 20040420 WO 2004096135 A3 20050324
PΙ
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            GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
            LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
            NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
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        RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
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            SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,
            TD, TG
    AU 2004233835
                       A1
                               20041111 AU 2004-233835
                                                                 20040420
    CA 2522435
                               20041111 CA 2004-2522435
                        A1
                                                                20040420
                        A2 20060308 EP 2004-750420
    EP 1631548
                                                                 20040420
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            IE, SI, LT, LV, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK
                   A 20060726 CN 2004-80017036 20040420
    CN 1809536
                             20061026 JP 2006-513183
                        Τ
    JP 2006524257
                                                                20040420
    US 20060270673
                       A1 20061130 US 2005-554187
                                                               20051021
                       A 20071019 IN 2005-DN5183
P 20030424
W 20040420
    IN 2005DN05183
                                                                20051110
PRAI US 2003-465125P
WO 2004-US12265
OS
    MARPAT 141:406038
AΒ
    The present invention is directed to compds. which contain a substituted
     pyridine moiety which inhibit the activity of Akt, a serine/threonine protein
     kinase. The invention is further directed to chemotherapeutic compns.
     containing the compds. of this invention and methods for treating cancer
     comprising administration of the compds. of the invention.
ΙT
    790659-74-4P
    RL: BSU (Biological study, unclassified); PAC (Pharmacological activity);
    RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES
        (substituted pyridine compds. as inhibitors of protein kinase Akt
        activity for treating cancer)
    790659-74-4 CAPLUS
CN
    3-Pyridine carbonitrile, 5-phenyl-6-[4-[[[[4-(1,2,3-thiadiazol-4-(3-2))]]]]
    yl)phenyl]methyl]amino]methyl]phenyl]-, trifluoroacetate (9CI) (CA INDEX
    NAME)
    CM
         1
    CRN 790659-59-5
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CMF C28 H21 N5 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

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L4 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN
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AN 2003:737516 CAPLUS <u>Full-text</u>

DN 139:257284

TI Cathepsin cysteine protease inhibitors and their therapeutic use

IN Bayly, Christopher I.; Black, Cameron; Leger, Serge; Li, Chun Sing; McKay,
Dan; Mellon, Christophe; Gauthier, Jacques Yves; Lau, Cheuk; Therien,
Michel; Truong, Vouy-Linh; Green, Michael J.; Hirschbein, Bernard L.;
Janc, James W.; Palmer, James T.; Baskaran, Chitra

PA Merck Frosst Canada & Co., Can.; Axys Pharmaceuticals, Inc.

SO PCT Int. Appl., 282 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

FAN.		1 [ENT	NO.			KIN	D -	DATE			APPL	ICAT	ION I	NO.		D.	ATE	
PI	WO 2003075836			A2 20030918			WO 2003-US6147						20030228					
	WO	WO 2003075836 A3				20040715												
		W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
			CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
			GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KR,	KΖ,	LC,	LK,	LR,	LS,
			LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NΖ,	OM,	PH,	PL,
			PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	ΤJ,	TM,	TN,	TR,	TT,	${\sf TZ}$ ,	UA,
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								GΑ,										
	CA	2477	657							CA 2003-2477657								
											AU 2003-219953					20030228		
	ΑU	2003	2199	53														
	US 20030232863			A1 20031218				US 2003-377377					20030228					
	EΡ	IP 1482924			A2	A2 20041208			EP 2003-716238				20030228					
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙΤ,	LI,	LU,	NL,	SE,	MC,	PT,
			ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	SK	
	BR	2003	0082	8 0		А		2005	0111		BR 2	BR 2003-8208				20030228		
	CN 1638757					А		20050713 CN 2003-805181						20030228				

## 10/554,187

-	JP 2005526753	T	20050908	JΡ	2003-574112	20030228
I.	NZ 534583	A	20061130	NZ	2003-534583	20030228
F	RU 2312861	C2	20071220	RU	2004-129587	20030228
2	ZA 2004006293	A	20060726	ZA	2004-6293	20040806
J	JS 20050240023	A1	20051027	US	2004-505796	20040825
]	IN 2004CN01940	A	20070720	IN	2004-CN1940	20040831
N	MX 2004PA08621	A	20041206	MX	2004-PA8621	20040903
I.	10 2004004207	A	20041124	NO	2004-4207	20041004
PRAI U	JS 2002-361818P	P	20020305			
J	JS 2002-408704P	P	20020906			
V	NO 2003-US6147	W	20030228			
OS N	MARPAT 139:257284					

AB This invention relates to cysteine protease inhibitors R7(D)nCR6R7NR8CR3R4C(:O)NHCR1R2CN (R1-4 = H, (substitu-

R7(D)nCR6R7NR8CR3R4C(:0)NHCR1R2CN (R1-4 = H, (substituted)C1-6-alkyl or C2-6-alkenyl; R1 and R2 or R3 and R4 may be take together with the C atom to which they are attached to form a (substituted)C3-8-cycloalkyl or heterocyclic ring; R5 = H, (substituted)C1-6-alkyl; R6 = (substituted)aryl, heteroaryl, C1-6-haloalkyl, arylalky, heteroarylalkyl; D = (substituted)C1-3-alkyl, C2-3-alkenyl, C2-3-alkynyl, aryl, heteroaryl, C3-8-cycloalkyl, heterocyclyl; R7 = H, (substituted)C1-6-alkyl, C2-6-alkenyl, C2-6-alkynyl, C1-6-alkyloxy, etc.; R8 = H, C2-6-alkyl) including but not limited to, inhibitors of cathepsins K, L, S and B. These compds. are useful for treating diseases in which inhibition of bone resorption is indicated, such as osteoporosis.

IT 603140-97-2P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(cathepsin cysteine protease inhibitors and their therapeutic use)

RN 603140-97-2 CAPLUS

CN Pentanamide, 2-[[(1S)-1-[4-[5-chloro-3-[4-(methylsulfonyl)phenyl]-2-pyridinyl]phenyl]-2,2,2-trifluoroethyl]amino]-N-(cyanomethyl)-4-methyl-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

$$\begin{array}{c|c} F_3C & S & \stackrel{H}{\longrightarrow} & S \\ \hline & i-Bu & \\ Me & & \\ & &$$

=> log y
STN INTERNATIONAL LOGOFF AT 11:54:29 ON 15 APR 2008